

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-16 (Cancelled)

17. (Currently Amended) A method for operating a communication network, said method comprising:

employing data frames defined by a first protocol, ~~each~~ a data frame containing a destination address identifying a data frame receiver to receive said data ~~frames~~ frame and message data;

C generating data packets for transmission from said data frame, ~~said~~ a data packet ~~packets~~ comprising a portion of said data frame, the data packet being defined by a second protocol, each data packet containing a connection identifier identifying a data packet receiver to receive said data packet ~~and a portion of said data frame;~~

transmitting said data packets over said communication network;

upon receipt in a receiver of a transmitted data packet containing a destination address of a subject data frame, reading said destination address of the subject data frame from said transmitted data packet;

determining a new connection identifier based on said destination address, said new connection identifier identifying a new data packet receiver;

generating, prior to receipt of all of said data packets of said subject data frame, new data packets from data packets received from said subject data frame, said new data packets containing said new connection identifier;

checking message data of said subject data frame for transmission errors according to a predetermined error checking technique, the predetermined error checking technique comprising comparing reference data having a rated value and contained in said subject data frame to said message data; and

transmitting new data packets of said subject data frame that are error-free to said new data packet receiver.

18. (Currently Amended) The method according to claim 17, further comprising:

modifying said message data of said subject data frame; and

generating new reference data for said subject data frame according to said packet error checking technique, said new reference data being compared instead of said ~~previous~~ reference data.

19. (Previously Presented) The method according to claim 18, wherein said message data is modified to contain a counter value dependent on prior transmissions of said subject data frame.

20. (Previously Presented) The method according to claim 18, wherein said checking said message data for transmission errors and said generating said new reference data occur contemporaneously with said generating said new data packets of said subject data frame.

21. (Previously Presented) The method according to claim 17, wherein said generating said new data packets occurs contemporaneously with receipt of said data packets.

22. (Previously Presented) The method according to claim 17, wherein said first protocol is the Internet protocol or a protocol based on the Internet protocol; and wherein said second protocol is the ATM protocol or a protocol based on the ATM protocol.

23. (Previously Presented) The method according to claim 17, further comprising:
storing an entry for assisting in recognizing said data packet containing said destination address in a first revaluation memory, said first revaluation memory for storing said connection identifier of said data packet of said subject data frame containing said destination address.

24. (Currently Amended) The method according to claim 23, further comprising ~~the steps~~
~~of~~:

after receiving said data packet of said subject data frame having said destination address,
overwriting said entry in said first revaluation memory with said new connection identifier; and

after receiving a last data packet of said subject data frame, overwriting said new connection identifier stored in said first revaluation memory with said entry.

25. (Previously Presented) The method according to claim 24, wherein new connection identifiers for data packets of said subject data frame received after said data packet containing said destination address are identified with assistance of said new connection identifier stored in said first revaluation memory.

26. (Previously Presented) The method according to claim 17, further comprising:
storing said new connection identifier for said data packet containing said destination address in a second revaluation memory, said second revaluation memory used for allocating said new connection identifier to said destination address.

27. (Previously Presented) The method according to claim 26, wherein at least one of said first revaluation memory and said second revaluation memory is an associative memory.

28. (Currently Amended) A switching unit for switching data, the data comprising a number of data frames each containing message data arranged according to a first protocol and containing a destination address identifying a receiver of said data frame, and a number of data packets for transmission, said data packets each containing a portion of said message data of a

data frame arranged according to a second protocol and containing a connection identifier identifying said switching unit as receiver of said data packets, the switching unit comprising:

a receiver for receiving said transmitted data packets;

a processing unit for reading a destination address from a data packet, comprising a portion of said data frame ~~of a data frame containing said destination address~~, and for determining a new connection identifier for a new receiver based on said destination address for generating new data packets from ~~said~~ received data packets of said data frame, said new data packets each containing said new connection identifier, said generating of new data packets beginning prior to receipt of all of said data packets of said data frame;

an error checking unit for checking ~~said~~ received message data of said data frame for transmission errors according to a predetermined error checking technique by comparing a reference data having a rated value included in said data frame with said received message data; and

a transmission unit for sending said new data packets of said data frame that were received error-free to said new receiver.

29. (Previously Presented) The switching unit according to claim 28, further comprising:

a first revaluation memory used for allocating said new connection identifier to at least one connection identifier of a received data packet.

30. (Previously Presented) The switching unit according to claim 29, wherein said first revaluation memory comprises an entry having a predetermined value identifying connection identifiers of received data packets for which new connection identifiers must still be generated.

31. (Previously Presented) The switching unit according to claim 28, further comprising:
a second revaluation memory used for allocating said new connection identifier to at least one destination address.

32. (Previously Presented) The switching unit according to claim 31, wherein at least one of said first revaluation memory and said second revaluation memory is an associative memory.

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